

Page 1

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2327	Rev D

0.00

Hardinge CNC LATHE SMALL

Hardinge

Memo

0.00

Hardinge CNC Lathe Small

Turn per Folio FA232 and Dwg D2327 Deburrr

31 0 DAS 44 15/09/28
9-89

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

31 ~~0~~ DAS 44 15/09/28
8-89

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.00

Quality Control

31 ~~9~~ DAS
40
9-50
15/09/29

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																	
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				OTHER : _____																																																																					

Work Order ID 136909

September 17, 2015 10:21:09 AM

136909

Page 2

Item ID: D2327-3 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Spacer Bushing
Start Date: 9/17/2015 Start Qty: 30.00 ***30*** Cust Item ID:
Required Date: 9/29/2015 Req'd Qty: 30.00 ***30*** Customer:
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>WA004</u>	0.00							
130									
Packaging	Memo	0.00							
Packaging	*****STOCK IN BASKET CELL***** LOCATION : WA004								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

31 ^{WAS} 27
SEP 28 2015

MLC SEP 29 2015

MLC SEP 29 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					

Picklist Print

September 17, 2015 10:21:17 AM

Page 1

Work Order ID: 136909

136909

Parent Item: D2327-3

D2327-3

Parent Item Name: Spacer Bushing

Start Date: 9/17/2015

Required Date: 9/29/2015

Start Qty: 30.00

Required Qty: 30.00

Comments: IPP F05.11.02Removed 303 SSKJ/EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304R0.375		Purchased	No			100	f	30.5730	0.1563	4.935789			
M304R0.375													
304 ROUND BAR 0.375													

DAS
44
9-89

15/09/28

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT	24	
M133038	12	
X M133175	12	
MAT028	6.573	
M132209	3.208	
X M132546	3.365	

3,755'

1.565'

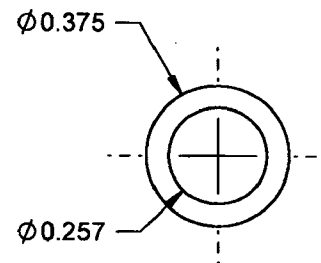
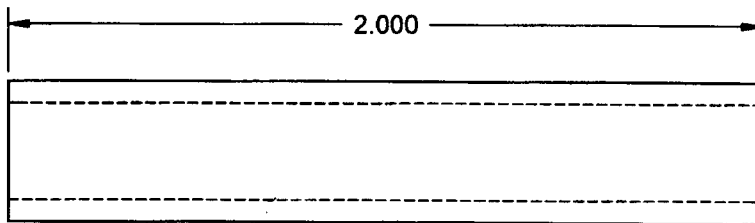
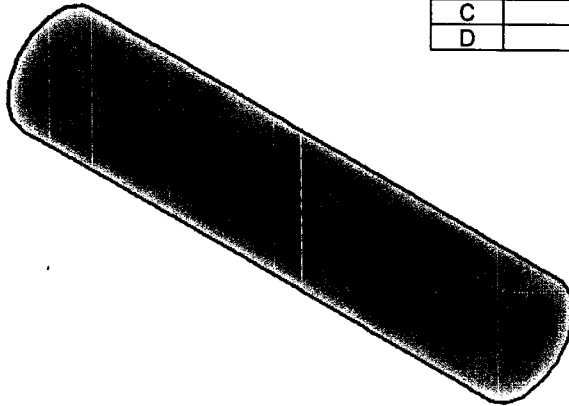


DESIGN BW	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED [Signature]	DRAWING NO. D2327	REV. D SHEET 1 OF 1
DATE 06.10.12	TITLE SPACER BUSHING		SCALE 2:1
REV	DATE	DESCRIPTION	
A	94.12.17	NEW ISSUE	
B	95.12.06	LENGTH CHANGE	
C	03.05.13	303 SS SPEC ADDED	
D	06.10.12	REMOVE 303 SS MATERIAL	

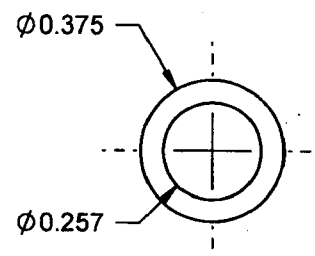
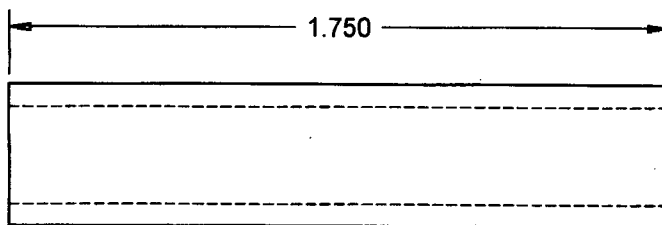
136909. SK 20150917

RELEASED

06.11.14 [Signature]



D2327-1 SPACER BUSHING



D2327-3 SPACER BUSHING

NOTES:

- 1) MATERIAL: AISI 304/316 SS, $\phi 0.375$, 0.065 WALL SEAMLESS ROUND TUBING
(REF. DART SPEC M304TR0.375W.065)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX



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DART AEROSPACE LTD		Work Order:	136909.
Description: Spacer Bushing		Part Number:	D2327-3
Inspection Dwg: D2327 Rev: D		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.375	+/-0.010	.374	✓		FK 04	Vern.
Ø0.257	+0.005/-0.000	.257	✓		"	"
1.750	+/-0.010	1.751	✓		"	"

Measured by: ^{DAS} 44		Audited by: ^{DAS} 40		Prototype Approval:	
Date: 15/09/28		Date: 15/09/29		Date:	
				N/A	
				N/A	

Rev	Date	Change	Revised by	Approved
A	04.01.13	New Issue	KJ/RF	
B	06.11.24	Dwg Revision revised	KJ/JLM	
C	08.01.28	Tolerance revised on Ø0.375	KJ/EC/DD	